

Hydra-Screed

OWNER'S MANUAL



Curb Roller Manufacturing

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Introduction & Warranty

1. INTRODUCTION

Congratulations on your purchase of a Hydra-Screed by Curb Roller.

The Hydra-Screed has been designed and manufactured to provide years of service.

Carefully examine your equipment upon receipt. Report any damage immediately to the freight carrier and register any claim. If any material or manufacturing defects be discovered, contact Curb Roller Manufacturing.

Read and understand this manual before setting up, operating and maintaining this equipment. Follow all safety instructions.

Information provided in this manual was current as of the issue date. Curb Roller Manufacturing reserves the right to make design changes without further notice or liability.

Information furnished in this manual does not include all of the details of design, production, or variations of the equipment. It does not cover all the possible contingencies, which may arise during operation. If special problems arise or further information be desired, please contact Curb Roller Manufacturing.

Equipment modifications from original design and specifications are strictly prohibited. Modifications may compromise safe operation subjecting users to serious injury or death, and may void any remaining warranty.

Curb Roller Manufacturing reserves the right to change, improve, modify or expand features of this equipment at any time. Specifications, models, or equipment are subject to change without notice, and without incurring any obligations to change, improve or expand features of previously delivered equipment. Because of the variations in optional equipment and continued design improvement, certain information contained within this manual may not apply.

This operators manual does not replace, nor does its use release the owner/operator from observing all safety codes or operating limitations as well as any applicable federal, state, provincial or local regulations.

2. WARRANTY

Curb Roller Manufacturing warrants to the original purchaser that this product will be free from defects in material and workmanship.

Curb Roller Manufacturing agrees to repair or replace, at manufacturer's discretion, any defective product free of charge within three years from the date of purchase.

If any of the warranted goods are found by Curb Roller Manufacturing to be defective in material or workmanship, such goods will at Curb Roller's option be replaced or repaired. All warranty claims will be addressed upon inspection of goods returned, prepaid, and/or review of the claim (photos with notification of alleged defects) by a direct Curb Roller Manufacturing representative.

Curb Roller Manufacturing must authorize all work and returns prior to any work being performed or returns made. If the customer does perform work and makes a return without authorization, the customer does so with the understanding that Curb Roller Manufacturing or any of its agents shall not be obligated for the cost of any such unauthorized expenses or actions.

The purchaser of any goods covered by this warranty understands and agrees that the sole and exclusive remedy against Curb Roller Manufacturing shall be for the replacement or repair of defective goods as provided herein.

All allowances will be credited at factory cost, with no provisions for overtime, travel time, mileage, freight charges or special services, i.e. down time.

Proof of purchase in the form of your dated sales receipt showing serial number and the model of the product will be required before our dealers can perform warranty service on the product.

Curb Roller Manufacturing Products Warranty Period

1. Warranted for a period of three (3) year after date of original purchase to original purchaser.
2. Replacement parts provided under the terms of warranty applicable to and/or the product on which installed as if such parts were original components of that product.

Curb Roller Manufacturing Products Warranty Shall Not Extend Or Apply To:

1. Defects which in our judgment are the result of misuse, negligence, accident, or failure to perform regular maintenance or service, and any parts that may wear and need to be replaced.

Introduction & Warranty

2. Products and component parts not manufactured by Curb Roller Manufacturing beyond the warranty period provided by the original manufacturer or supplier.
3. Products improperly installed, maintained, or used not in accordance with all applicable Curb Roller Manufacturing instructions.
4. Goods or component parts that are modified or changed in any way other than by, or authorized by, Curb Roller Manufacturing.

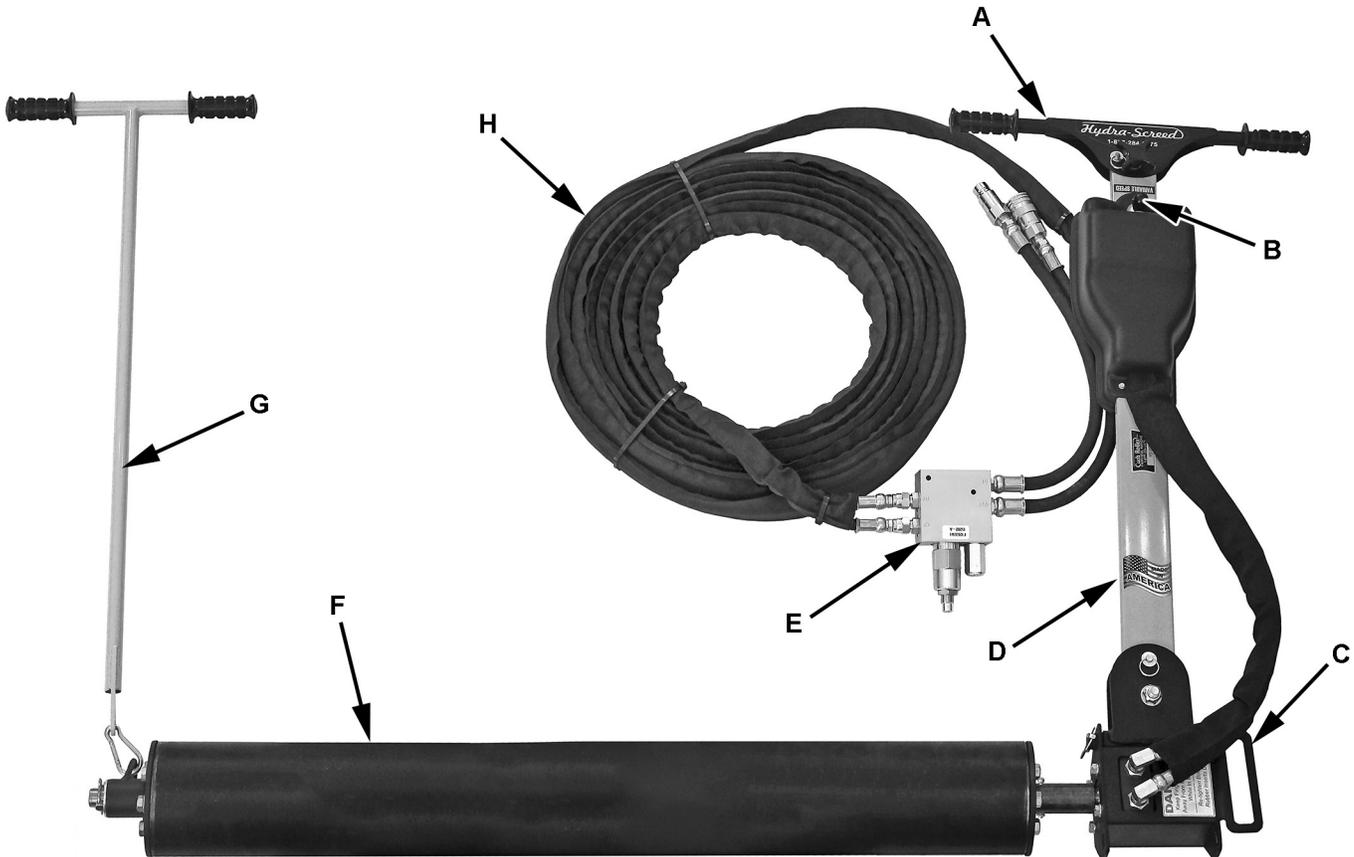
Warranty questions or service information can be obtained from your dealer or contact Curb Roller Manufacturing at 785-467-3132

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Equipment Identification

3. EQUIPMENT IDENTIFICATION

- A. Handlebar Assembly
- B. Directional Control Knob
- C. Hydraulic Motor And Motor Cage
- D. Handle
- E. Flow Control Block
- F. Drum
- G. T-Bar Pull Handle
- H. Hose Assembly



Specifications

4. SPECIFICATIONS

Length (Without Pipe).....50 in (1270 mm)
Width (Without Pipe).....25 in. (635 mm)
Weight (Without Pipe)..... 100 lbs (45 kg)
Minimum Hydraulic Flow5 gpm (9 lpm)
Maximum Hydraulic Pressure.....2250 psi (11 bar)

Various standard and custom pipes/rollers are available from Curb Roller Manufacturing.

Safety

5. SAFETY

Before assembling and operating this equipment, you must read, understand and follow the instructions and safety warnings in this manual. Your Hydra-Screed may not be equipped with some of the optional equipment shown in the illustrations in this manual.

If you have any safety concerns or questions that are not covered by this manual, please contact Curb Roller Manufacturing at 785-467-3132.

The safety information in this manual is denoted by the safety alert symbol:  This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

The level of risk is indicated by the following signal words:

DANGER

Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING

Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates a situation that could result in damage to the machine or other property.

5.1 HAZARDS

WARNING

Do not operate, work on or around this machine while under the influence of alcohol, drugs or if feeling ill.

WARNING

Entanglement hazard.

Keep away from moving parts.

Do not wear loose fitting clothing. Loose fitting clothing and long hair can become entangled in moving or rotating parts.

Long hair must be tied back or netted.

Never operate machine with open or missing guards or shields.

WARNING

Observe federal, state/provincial and local safety codes and regulations that apply to the job site.

WARNING

Pressurized fluids can penetrate the skin.

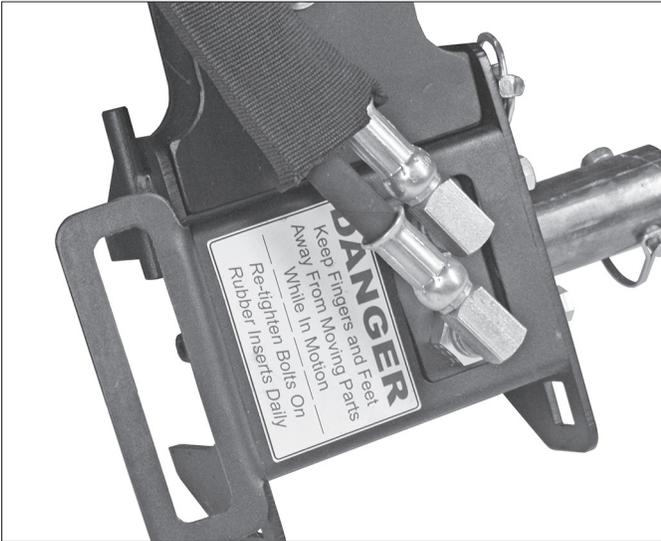
Hydraulic hoses can fail from age, damage and exposure.

Do not search for hydraulic leaks without body and face protection. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.

Use wood or cardboard to detect hydraulic leaks, never use your hands.

5.1 DECAL PART NUMBER

1. CR201



Assembly

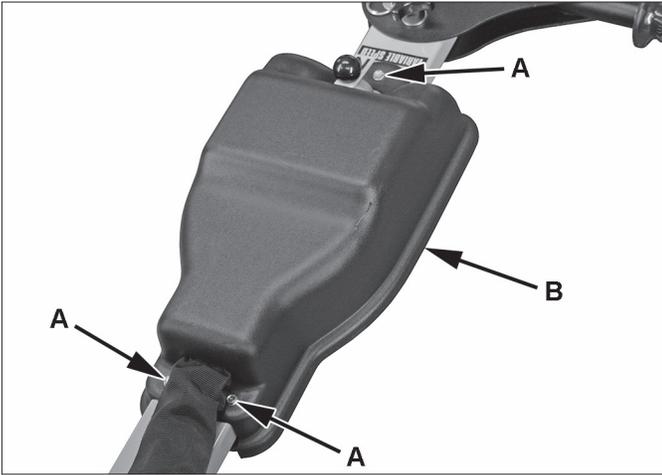
6. ASSEMBLY

⚠ WARNING

Hydra-Screed assembly weight (without drum) is approximately 100 lbs (45 kg).

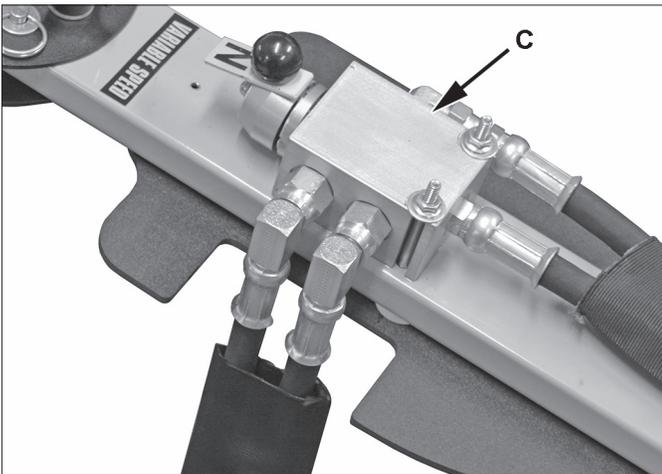
Plan a safe handling procedure before lifting.

1. Remove screws (A) and cover (B).

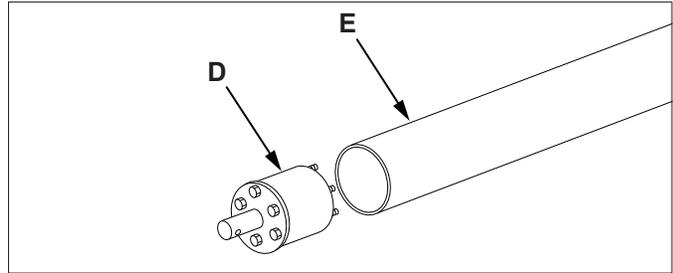


2. Install hydraulic hoses to directional valve (C). Hoses must be oriented down through opening in plate as shown.

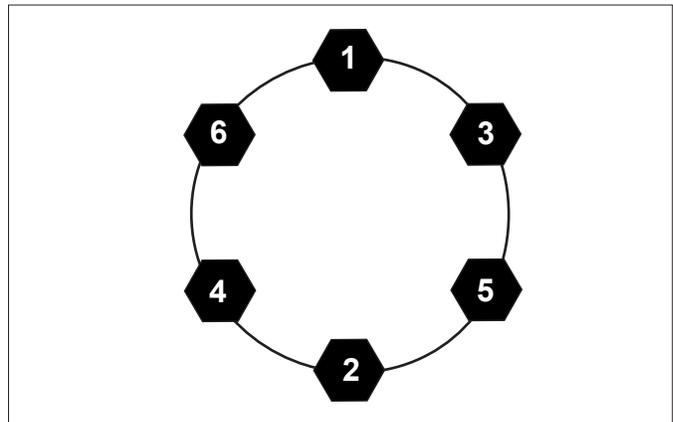
3. Install cover (B) and screws (A).



4. Install drive and pull bushing end assemblies (D) into screed pipe (E).



5. Tighten bolts uniformly in the sequence shown in graphic below until tight.



⚠ WARNING

Do not alter, change or modify the Hydra-Screed.

Altering, changing or modifying the equipment may cause unsafe conditions or damage the equipment, and may void the manufacturer's warranty.

Contact Curb Roller with any questions.

Operation

7. OPERATION

7.1 CONNECT TO POWER SOURCE

⚠ WARNING

Prevent injury.

Verify directional valve is in neutral position before connecting hydraulics.

⚠ WARNING

Pressurized fluids and grease can penetrate the skin.

Hydraulic hoses can fail from age, damage and exposure.

Do not search for hydraulic leaks without body and face protection. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention.

Use wood or cardboard to detect hydraulic leaks, never use your hands.

1. Verify directional valve (A) is in neutral position as shown.



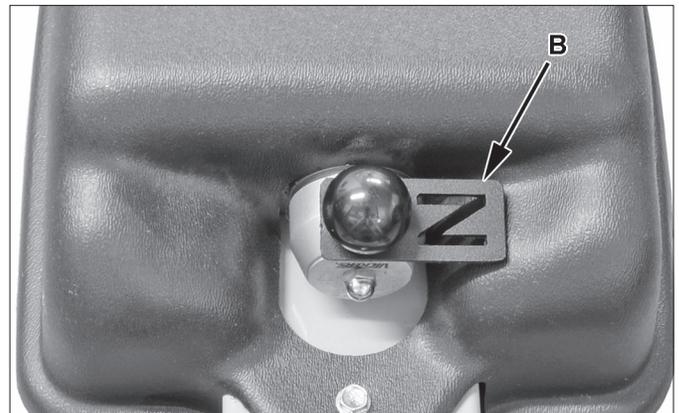
2. Connect hydraulic hoses to hydraulic power source.

⚠ WARNING

Hydra-Screed assembly weight (without drum) is approximately 100 lbs (45 kg).

Plan a safe handling procedure before lifting.

3. Move Hydra-Screed to grass or sand.
4. Turn on hydraulic power source.
5. Grasp Hydra-Screed handle and move directional valve (A) to one side, left or right. Drum is turning correctly if spinning away from operator. If not spinning correctly, move directional valve in opposite direction.
6. Once drum rotation is determined, loosen knob and move neutral stop plate (B) 90° to opposite side. Tighten knob. Stop plate will prevent accidentally reversing drum rotation.



7. If drum does not spin when hydraulic source is turned on and directional valve out of neutral position:
 - Move directional valve to neutral position.
 - Stop hydraulic source.
 - Disconnect hoses from hydraulic power source and switch hose ends.
 - Connect hoses to hydraulic power source.
 - Turn on hydraulic power source.
 - Grasp Hydra-Screed handle and move directional valve to one side, left or right.
 - Verify proper operation.
 - Set neutral stop plate as described in step 6.
8. The further directional valve is moved, the faster drum will turn. Fast speeds may vibrate concrete to the point that concrete may slump off. Slow speeds may not produce a flawless finish. Adjust speed on directional control valve so that Hydra-Screed is comfortable to handle during operation.

Operation

7.2 OPERATION

1. Verify stakes or pins are below top of forms to prevent interference with Hydra-Screed.
2. Pour concrete into forms.
3. Keep top of forms free of concrete.

⚠ WARNING

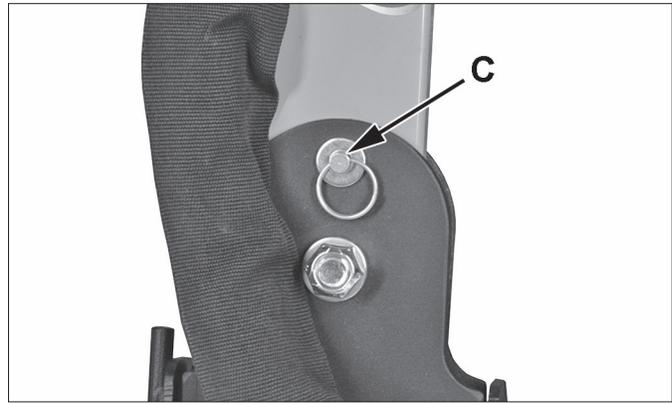
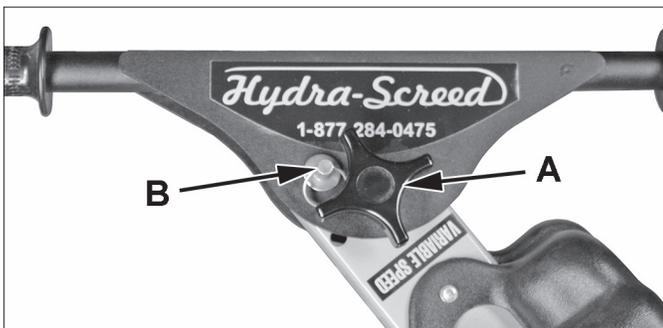
Hydra-Screed assembly weight (without drum) is approximately 100 lbs (45 kg).

Plan a safe handling procedure before lifting.

4. Place Hydra-Screed drum on top of forms. Hydra-Screed operation requires two people.



5. If necessary, handle may be moved to an offset position. Loosen knob (A), remove pins (B) and (C), move handle and handlebar assembly to offset position. Install pin (B) and tighten knob (A). Lower pin (C) will not be used when handle is in the offset position.



6. With one person on the operators handlebar and one on the T handle, begin screeding with drum spinning in the opposite direction it is being pulled. Excess concrete that is being spun towards the operator must be raked away by a third person.
7. If there are bad spots, fill them in with concrete and run the Hydra-Screed back over these areas.

7.3 CLEANUP

1. Move Hydra-Screed away from poured concrete.
2. Remove all concrete from Hydra-Screed with garden hose or pressurized water supply.

8. MAINTENANCE

8.1 DRUM BUSHING

1. Pump grease into pull bushing before each use.



8.2 RUBBER BUSHINGS

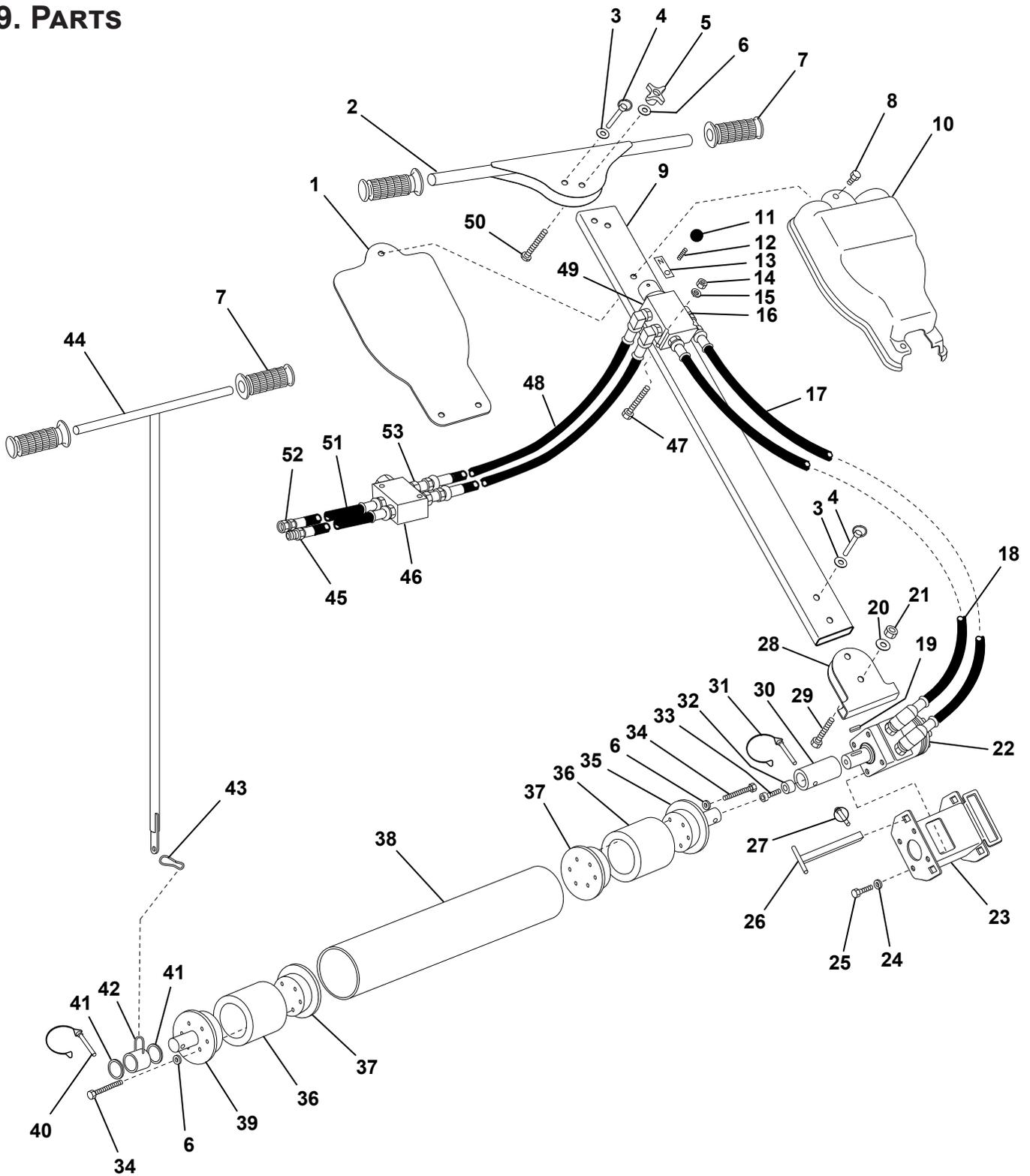
Rubber bushing assemblies left inside the screed pipe for long periods of time can seize up inside the pipe. Remove rubber bushings from screed pipe after each use.

8.3 DRUM BUSHING BOLTS

Bolts in the bushing assemblies are coated with anti-seize when assembled. Re-apply anti-seize to all bushing assembly bolts at least once a year.

Parts

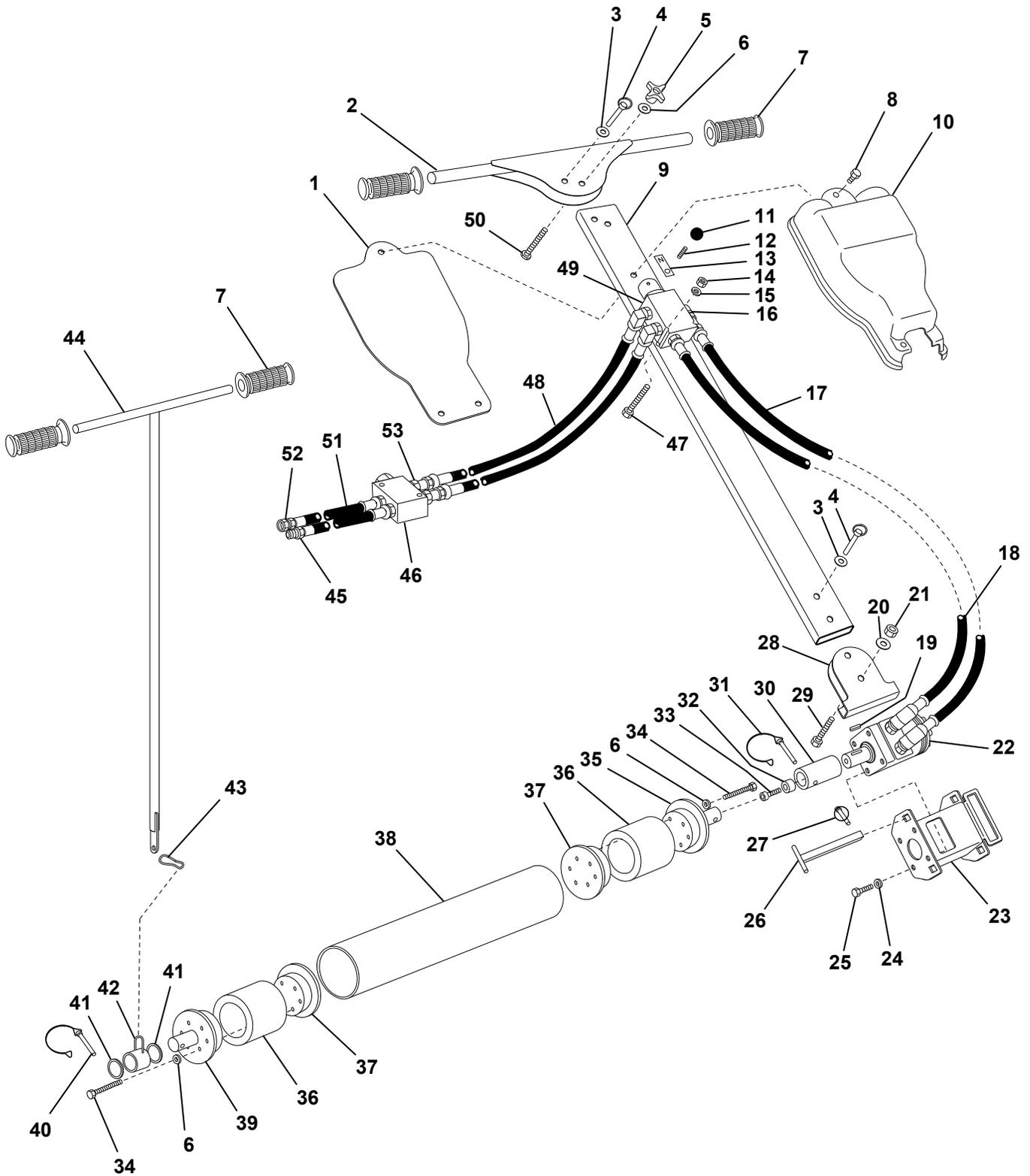
9. PARTS



Parts

Number	Qty.	Description	Part Number
1	1	Valve Bottom Cover	CR148
2	1	Handlebar	CR149
3	2	Flat Washer, 5/16 Inch	CR102
4	2	Pin, 3/8 x 2 Inch	CR103
5	1	Knob	CR104
6	13	Flat Washer, 1/2 Inch	CR105
7	4	Grip	CR106
8	7	Self Tapping Screw, #10 x 1 Inch	CR107
9	1	Frame Handle	CR108
10	1	Valve Top Cover	CR109
11	1	Variable Speed Knob	CR154
12	1	Variable Speed Knob Stud	CR155
13	1	Neutral Tab	CR153
14	2	Hex Flange Nut, 1/4 Inch	CR110
15	2	Flat Washer, 1/4 Inch	CR111
16	1	3/8 Elbow JIC to O-Ring Fitting	CR157
17	1	Hydraulic Hose	HS168
18	1	Hydraulic Hose	HS113
19	1	Round Nose Key	CR151
20	1	Flat Washer, 5/8 Inch	CR121
21	1	Nylock Nut, 5/8 Inch	CR122
22	1	Hydraulic Motor	CR140
23	1	Motor Cage	HS180
24	4	Lock Washer, 3/8 Inch	CR138
25	4	Hex Bolt, 3/8 x 1 Inch	CR137
26	1	Motor Mount Pin	HS181
27	1	Lynch Pin, 1/4 Inch	HS182
28	1	Handle Connector	HS183
29	1	Hex Bolt, 5/8 x 2-1/2 Inch	CR129
30	1	Drive Coupler	HS184
31	1	Lynch Pin, 3/8 Inch	HS191
32	1	Coupler Keeper	HS192
33	1	Socket Head Cap Screw, 1/4-20 x 3/4 Inch	HS193
34	12	Hex Bolt, 1/2 x 6 Inch, Full Thread	HS194
35	1	Short Shaft Bushing Flange, Drive End	HS195
36	2	Rubber Bushing	HS196
37	2	Threaded Bushing Flange	HS197
38	1	Pipe, Order Per Foot	HS187
39	1	Long Shaft Bushing Flange, Static End	HS198
40	1	Lynch Pin, 5/16 Inch	HS186
41	2	Bushing Washer	HS200
42	1	Pull Bushing	HS188
43	1	Spring Snap	HS189
44	1	T Handle	HS190
45	1	Hydraulic Coupler, Male	CR175
46	1	Flow Control Block	CR144

Parts



Facts

10. TROUBLESHOOTING

Pipe/roller does not spin.

The Hydra-Screed must be connected to an active hydraulic power source. Check the power source for any safety features limiting the auxiliary flow.

Pipe/roller spins very slowly.

Reverse direction of flow from the power source and verify that the machine has not been altered any way from the factory settings.

Pipe/roller is spinning too fast.

The Hydra-Screed is equipped with a variable speed valve on the handle. To achieve the desired speed, move the directional valve right or left to open and increase speed, or close the valve and reduce flow to reduce the speed.

The Hydra-Screed will not stay on forms (riding up on concrete).

Check the amount of concrete in front of the pipe/roller. Be sure to maintain no more than two inches of concrete in front of the pipe/roller. In certain areas of the U.S. some concrete mixes require an additional weight. Please contact Curb Roller Mfg., for further information.

11. FACTS

What is the pipe/roller made out of?

The pipe/roller is made of 6 inch 10 gauge round stouting.

How many feet of hydraulic hose can I run?

The Hydra-Screed comes standard with 40 feet of hydraulic hose and can be used with any length of hose up to 100 feet.

What drives the Hydra-Screed?

Any hydraulic source that maintains 4 gallons per minute can effectively run the Hydra-Screed, i.e. skid-steer, mini-excavator, tractor or hydraulic power pack.

How do I adjust the speed of the Hydra-Screed?

The Hydra-Screed comes standard with a Flow-Control Block. This is factory set and NOT ADJUSTABLE. On the handle of the Hydra-Screed is a VARIABLE SPEED DIRECTIONAL VALVE, which operates left-to-right depending on the direction of desired rotation. The Hydra-Screed comes with a safety TAB, which is located on the directional KNOB and can be manually set to allow the valve to open towards the right or open towards the left. To set the safety tab – loosen the knob on the directional valve turning it counter-clockwise. Once the safety stop is in the desired position, RE-TIGHTEN the knob.